To: Way, Steven[way.steven@epa.gov]

From: Matt Francis

**Sent:** Fri 8/29/2014 4:41:31 PM **Subject:** RE: Gold King - I beams

If the beams are parallel and we can trench, is it an issue?

Sent via the Samsung Galaxy Note® 3, an AT&T 4G LTE smartphone

----- Original message -----

From: "Way, Steven"

Date:08/29/2014 10:36 AM (GMT-07:00)

To: Matt Francis

Subject: RE: Gold King - I beams

Matt,

Let's see if this is even what they want to do. The other option to project the steel is to put is some clean bedding material.

----Original Message-----

From: Matt Francis [mailto:m.francis@erllc.com]

Sent: Friday, August 29, 2014 10:29 AM

To: Way, Steven Subject: Fwd: Gold King

Sent via the Samsung Galaxy Note(r) 3, an AT&T 4G LTE smartphone

----- Original message -----

From: Bob Heeter

Date:08/29/2014 10:18 AM (GMT-07:00)

To: Matt Francis Subject: RE: Gold King

I'll do some checking on some coatings, the steel sets would have to be sand blasted prior to any coating being applied.

----Original Message-----

From: Matt Francis [mailto:m.francis@erllc.com]

Sent: Friday, August 29, 2014 10:15 AM

To: Bob Heeter Cc: Chris Hassel Subject: RE: Gold King

Any kind of spray on coating you are aware of?

Sent via the Samsung Galaxy Note(r) 3, an AT&T 4G LTE smartphone

----- Original message -----

From: Bob Heeter

Date: 08/29/2014 10:13 AM (GMT-07:00)

To: Matt Francis Cc: Chris Hassel Subject: RE: Gold King

Matt, the beams would run parallel to the tunnel and they will be anchored to the sill with 4' dywidag bolts on about 4' centers adding the rigidity of the individual sets and steel set structure as a whole. As far as the pH of the water, sizing of the grade beam would increase life to an extent, however the steel sets are a different matter they are what they are unless we what to change them to a different material. What is the life expectancy of the adit. Thanks in advance for the mine rescue info.

Thanks Bob

----Original Message----

From: Matt Francis [mailto:m.francis@erllc.com]

Sent: Friday, August 29, 2014 9:55 AM

To: Bob Heeter Cc: Chris Hassel Subject: RE: Gold King

EPA likes the grade beam idea provided they can go parallel to the bottom rather than crossing from side to side. The reason for that is if they cross we will have to figure out a way to pipe the water across them. I understand crossing would add rigidity but the water is an issue. We tested the pH of the water after you left and found it is 2.65. Obviously that presents an unexpected curveball for both steel and concrete. Any suggestions?

EPA has contacted San Juan Mine rescue and I have thier call list I can forward you.

I'll talk with them about dumping over the edge. Not sure why they've indicated they want it accumulated on top.

Thanks for coming down yesterday. Truly appreciated. Matt

Sent via the Samsung Galaxy Note(r) 3, an AT&T 4G LTE smartphone

----- Original message -----From: Bob Heeter

Date: 08/29/2014 9:43 AM (GMT-07:00)

To: Matt Francis Cc: Chris Hassel Subject: Gold King

Matt, good morning, good to see you yesterday. As we discussed yesterday, I will get after ordering tie rods, bolts nuts and washers for the steel sets. I would like to get the decision on the grade beams like we talked about so I can get that steel on the way, or figure out how I am going to form and pour either individual concrete footers like they are asking for in the drawings. I will get some 3" X 6" lagging for in the web of the steel and some 6" X 6" timbers for the cribbing over the sets. You said we could just store the muck next to the portal, will this be better than just dumping it over the existing dump. I will supply

compressed air and a small generator at this point. If we end up further in the tunnel than the anticipated 100' we will have to look at ventilation, communications, and utilities installation. The steel sets look fine, we will have to drill the foot plates for anchor bolts. Since we do not anticipate going in further than 100' into the tunnel will it be necessary for me to contact mine rescue personnel? I will check with Tony on Tuesday and make sure he has a spare jackleg, wilden pump, drill steel, etc, in case you will need assistance drilling those holes at the lower portal, if necessary will you be able to supply compressed air? Let me know if you think of anything.

Thank you,
Bob Heeter
Superintendent
[cid:image001.jpg@01CFC36A.C61D4370]
HARRISON WESTERN CONSTRUCTION CORPORATION
1208 Quail Street
Lakewood, Colorado 80215
T (303) 234.0273 x202 | C (775-340-1776) F (303) 237.9868 |

www.harrisonwestern.com<a href="http://www.harrisonwestern.com<a href="http://www.harrisonwester

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